

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-111. (Cancelled).

112. (Currently Amended) ~~The A~~ method for constructing a data packet having both a payload segment that carries data associated with a link layer (MAC) or network layer (IP) address and a header segment that has one or more fields, the method comprising:
generating an address value based on the network layer address or link layer address at the transmitting terminal;
formatting the address value; and
populating the formatted address value into a field of the header that will be used as a selection criteria by a receiving terminal, wherein the selection criteria is established without the ~~used~~ use of tables used to link a packet identification to a multicast network layer address.

The following NEW claims are now presented for consideration by the Examiner:

113. (New) An apparatus, comprising:
at least one processor; and
at least one memory including executable instructions, the at least one memory and the executable instructions being configured to, in cooperation with the at least one processor, cause the apparatus to perform at least the following:
construct a data packet having both a payload segment that carries data associated with a link layer (MAC) or network layer (IP) address and a header segment that has one or more fields, the at least one memory and the executable instructions being further configured to, in cooperation with the at least one processor, cause the apparatus to:
generate an address value based on the network layer address or link layer address;
format the address value; and

populate the formatted address value into a field of the header that will be used as a selection criteria by a receiving terminal, wherein the selection criteria is established without the use of tables used to link a packet identification to a multicast network layer address.

114. (New) An article of manufacture, comprising:

a non-transitory computer readable medium including instructions for:

constructing a data packet having both a payload segment that carries data associated with a link layer (MAC) or network layer (IP) address and a header segment that has one or more fields, the constructing comprising instructions for:

generating an address value based on the network layer address or link layer address;

formatting the address value; and

populating the formatted address value into a field of the header that will be used as a selection criteria by a receiving terminal, wherein the selection criteria is established without the use of tables used to link a packet identification to a multicast network layer address.

115. (New) An apparatus, comprising:

at least one processor; and

at least one memory including executable instructions, the at least one memory and the executable instructions being configured to, in cooperation with the at least one processor, cause the apparatus to perform at least the following:

select a desired data packet from a plurality of data packets, wherein each of the plurality of data packets comprises a payload segment that carries data associated with a link layer (MAC) or network layer (IP) address and a header segment that has one or more fields, the at least one memory and the executable instructions being further configured to, in cooperation with the at least one processor, cause the apparatus to:

generate an expected value for a field in the header based on the network layer address or link layer address without the use of tables used to link a packet

identification to a multicast network layer address, wherein said field is used as selection criteria; and

examine the field used as selection criteria in each packet in a plurality of incoming packets so as to identify packets that contain the expected value.

116. (New) An article of manufacture, comprising:

a non-transitory computer readable medium including instructions for:

selecting a desired data packet from a plurality of data packets, wherein each of the plurality of data packets comprises a payload segment that carries data associated with a link layer (MAC) or network layer (IP) address and a header segment that has one or more fields, the selecting comprising instructions for:

generating an expected value for a field in the header based on the network layer address or link layer address without the use of tables used to link a packet identification to a multicast network layer address, wherein said field is used as selection criteria; and

examining the field used as selection criteria in each packet in a plurality of incoming packets so as to identify packets that contain the expected value.

117. (New) A system comprising:

a transmitting apparatus; and

a receiving apparatus;

the transmitting apparatus being configured to construct a data packet having both a payload segment that carries data associated with a link layer (MAC) or network layer (IP) address and a header segment that has one or more fields, wherein the construction further comprises the transmitting apparatus being configured to:

generate an address value based on the network layer address or link layer address;

format the address value; and

populate the formatted address value into a field of the header that will be used as a selection criteria by a receiving terminal, wherein the selection criteria is

established without the use of tables used to link a packet identification to a multicast network layer address;
the receiving apparatus being configured to select a desired data packet from a plurality of data packets, wherein the selection further comprises the receiving apparatus being configured to:

generate an expected value for a field in the header based on the network layer address or link layer address without the use of tables used to link a packet identification to a multicast network layer address, wherein said field is used as selection criteria; and

examine the field used as selection criteria in each packet in a plurality of incoming packets so as to identify packets that contain the expected value.